

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/111,731	SHIRAIWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jeffery A. Brier	2628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 6/6/2006.
2. ☒ The allowed claim(s) is/are 1,3-9 and 19 renumbered as 1-6, 8, 9, and 7 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|---|

### **Interview Summary**

1. On September 13, 2006 Examiner Jeffery A. Brier telephoned applicant's representative Mark Williamson concerning amending claims 1, 8, and 9 to overcome a possible 35 USC 101 issue by adding "displaying an image on a display unit based on the converted data" to claims 1 and 9 and by adding "a display unit for displaying an image based on the converted image data" to claim 8. The examiner also suggested changing "data" to "image data" in the preamble of claims 1, 8, and 9; in the converting step of claims 1 and 9; in the converting unit of claim 8; and in the proposed displaying an image of claims 1, 8, and 9. On September 15, 2006 applicant's representative Mark Williamson approved adding the display unit limitations to claims 1, 8, and 9 but did not approve changing "data" to "image data". Examiner Brier initially accepted this offer, however, after further review of the specification Examiner Brier telephoned Mark Williamson later the same day to request changing "data" to "image data" in the preamble of claims 1, 8, and 9; in the converting step of claims 1 and 9; in the converting unit of claim 8; in the displaying step of claims 1 and 9, in the display unit of claim 8 and in claim 19 to overcome possible 35 USC 112 issues. On September 19, 2006 applicant's representative Mark Williamson approved changing "data" to "image data" at the discussed locations.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Williamson on 9/19/2006.

The application has been amended as follows:

Please amend the specification as follows.

Page 42, line 23, has been amended by changing "1106." to --1105.--.

Please amend the claims as follows.

1. (Currently Amended) An image processing method for converting image data dependent on a first illuminating light into image data dependent on a second illuminating light, comprising the steps of:

storing a conversion condition for a light source having a high color rendering property and a conversion condition for a light source having a low color rendering property;

generating data indicating a proportion of synthesis of the stored conversion condition for the light source having the high color rendering property and the light source having the low color rendering property, corresponding to the second illuminating light;

generating a first conversion condition from the stored conversion condition for the light source having the high color rendering property and from the stored conversion condition for the light source having the low color rendering property, according to the data indicating the proportion of synthesis;

generating a second conversion condition for color temperature conversion, based on color temperature information of the second illuminating light; and

converting image data dependent on the first illuminating light into image data dependent on the second illuminating light using the first conversion condition and the second conversion condition $[[,]]$ ; and

displaying an image on a display unit based on the converted image data,

wherein the conversion condition for the light source having the high color rendering property is obtained from measurement data of plural patches under the light source having the high color rendering property and measurement data of the plural patches under a standard light source, and

the conversion condition for the light source having the low color rendering property is obtained from measurement data of plural patches under the

Art Unit: 2628

light source having the low color rendering property and measurement data of the plural patches under the standard light source.

8. (Currently Amended) An image processing apparatus for converting image data dependent on a first illuminating light into image data dependent on a second illuminating light, comprising:

a data storing unit for storing a conversion condition for a light source having a high color rendering property and a conversion condition for a light source having a low color rendering property;

a generating unit for generating data indicating a proportion of synthesis of the stored conversion conditions for the light source having the high color rendering property and the light source having the low color rendering property, corresponding to the second illuminating light;

a first calculating unit for generating a first conversion condition from the stored conversion condition for the light source having the high color rendering property and from the stored conversion condition for the light source having the low color rendering property, according to the data indicating the proportion of synthesis;

a second calculating unit for generating a second conversion condition based on color temperature information of the second illuminating light;  
and

a converting unit for converting image data dependent on the first illuminating light into image data dependent on the second illuminating light using the first conversion condition and the second conversion condition[[,]]; and

a display unit for displaying an image based on the converted image data.

wherein the conversion condition for the light source having the high color rendering property is obtained from measurement data of plural patches under the light source having the high color rendering property and measurement data of the plural patches under a standard light source, and

the conversion condition for the light source having the low color rendering property is obtained from measurement data of plural patches under the light source having the low color rendering property and measurement data of the plural patches under the standard light source.

9. (Currently Amended) A computer control program embodied in a computer-readable medium, for converting image data dependent on a first illuminating light into image data dependent on a second illuminating light, said program causing a computer to perform the steps of:

storing a conversion condition for a light source having a high color rendering property and a conversion condition for a light source having a low color rendering property;

Art Unit: 2628

generating data indicating a proportion of synthesis of the stored conversion conditions for the light source having the high color rendering property and the light source having the low color rendering property, corresponding to the second illuminating light;

generating a first conversion condition from the stored conversion condition for the light source having the high color rendering property and from the stored conversion condition for the light source having the low color rendering property, according to the data indicating the proportion of synthesis;

generating a second conversion condition based on color temperature information of the second illuminating light; and

converting image data dependent on the first illuminating light into image data dependent on the second illuminating light using the first conversion condition and the second conversion condition[[,]]; and

displaying an image on a display unit based on the converted image data.

wherein the conversion condition for the light source having the high color rendering property is obtained from measurement data of plural patches under the light source having the high color rendering property and measurement data of the plural patches under a standard light source, and

the conversion condition for the light source having the low color rendering property is obtained from measurement data of plural patches under the light source

Art Unit: 2628

having the low color rendering property and measurement data of the plural patches under the standard light source.

19. (Currently Amended) An image processing method according to Claim 1, further comprising a step of providing a preview image based on the converted image data.

### **Reasons for Allowance**

3. The following is an examiner's statement of reasons for allowance:

The arguments presented by applicant regarding the 35 USC 112 first paragraph rejection at page 11 of the 6/6/2006 response overcome the rejection 35 USC 112 first paragraph set forth in the office action mailed on 2/6/2006.

The prior art of record fails to teach or suggest An image processing method (or apparatus) for converting image data dependent on a first illuminating light into image data dependent on a second illuminating light, converting image data dependent on the first illuminating light into image data dependent on the second illuminating light using the first conversion condition and the second conversion condition, wherein the conversion condition for the light source having the high color rendering property is obtained from measurement data of plural patches under the light source having the high color rendering property and measurement data of the plural patches under a standard light source, and the conversion condition for the light source having the low



color rendering property is obtained from measurement data of plural patches under the light source having the low color rendering property and measurement data of the plural patches under the standard light source.

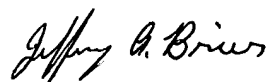
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2628

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Jeffery A. Brier". The signature is written in a cursive, flowing style.

Jeffery A Brier  
Primary Examiner  
Division 2628